Michael O. Leavitt
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State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
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October 14, 1996

TO: Minerals File

FROM: Tom Munson, Reclamation Hydrologist

RE: Site Inspection, Topaz Mine, Brush Wellman Mine, M/023/003, Juab County, Utah

Date of Inspection: September 12, 1996
Time of Inspection: 10:00 a.m. - 3:00 p.m.
Conditions: Sunny
Participants: Greg Hawkins and Clyde Yates, Brush Wellman; Tom Munson, DOGM

Purpose of Inspection: To inspect reclamation of mine site

On September 12, 1996, an inspection of the Brush Wellman mine occurred between Division inspector, Tom Munson and Brush Wellman representatives, Greg Hawkins and Clyde Yates. Areas of the Sigma Emma dump, the Section 16 #1, and a section of Roadside #1 and #2 were inspected for release. The Roadside #1 and #2 looked excellent, the Sigma Emma roadway looked good, and Section 16 #1 was considered marginal and released with conditions. Mr. Yates should be complemented for his work on the East Sigma Emma roadway. The erosion control measures incorporated by Mr.Yates were not only appropriate, but well thought out and implemented.

The reason for releasing and conditioning Section #16 was that this area would be considered a test area for use of alternative methods to incorporate organic matter into the soil. One method currently being tried is the use of sheep feeding and grazing in concentrated areas. This will be evaluated and any data collected, regarding the outcome of this test, will be included in the Annua Report. Future testing of the topsoils and subsoils must key into the necessary organic and saline so requirements trying to replicate other successes. It may be prudent to set up a test area to try variou soil amendments (i.e. gypsum, cow manure, etc.). According to Mr. Hawkins, all this will be well documented and coordinated with soil scientists.

The location of the future monitor pits were looked at and recent soil test pits examined. It was stressed by Mr. Hawkins that a definite soil horizon change occurred at about 6 inches where a saline layer was visually observed. In future stripping of soils for the monitor pit will be necessary that the stripping differentiates this layer from the soils below. Recent phone conversations with Mr. Hawkins verified that stripping of the monitor pit topsoils, per the six in criteria, had occurred. Approximately 60,000-70,000 cubic yards of prime topsoil has been sav

from the monitor pit area using the 6-8 inch criteria for stripping. A separate subsoil pile was also created with the material below 6 inches and will be tested before its future use for suitability. Mr. Hawkins hopes that this will benefit future reclamation.

The map showing past variances, reclaimed areas, and future mining areas was given to me during the inspection, along with some correspondence referencing past variances given by the Division. The map was somewhat confusing because of the different data sources from which it was drawn. Therefore it was suggested to simplify the map by including the information on the plate found in the mine plan, so that confusion over which areas are released is minimized.

jb
cc: Greg Hawkins, Brush Wellman
Will Stokes, SITLA
Ron Teseneer, BLM, House Range RA
M023003.mem

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